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10/665,536	09/22/2003	Tetsuro Motoyama	241505US CIP	5927

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EXAMINER

CHANKONG, DOHM

ART UNIT	PAPER NUMBER
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2452

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/665,536	Applicant(s) MOTOYAMA, TETSURO	
	Examiner DOHM CHANKONG	Art Unit 2452	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 11, 21-25 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11, 21-25 and 29-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/22/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This final rejection is in response to Applicant's amendment filed on 11/29/2010.

Applicant amends claims 1, 11, 21, 25, 29, 30, and previously cancelled claims 8-10, 12-20, and 26-28. Accordingly, Applicant presents claims 1-7, 11, 21-25, and 29-32 for further examination.

I. INFORMATION DISCLOSURE STATEMENT

The examiner has considered the information disclosure statement filed on 12/22/2010.

II. RESPONSE TO ARGUMENTS

Applicant argues that Fan and White do not disclose (A) obtaining first device information from an image printing device where the information includes at least two of static, semi-static, and dynamic states of the image printing device; (B) processing, by the first monitoring computer, stored information of the plurality of image printing devices monitored by the first monitoring computer to generate second device information that includes a statistical summary of status information of each of the plurality of image printing devices; and (C) transmitting, at regular periodic intervals or upon request, the second device information from the first monitoring computer to a second computer. Applicant's arguments are not persuasive for the following reasons.

A. Fan's printer resource level and printer name read on Applicant's claimed dynamic and static states of the imaging printing device.

Applicant argues that Fan is only directed to obtaining a printer resource level from a printer. The previous Office action rejection argued that Fan's system implicitly requires

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sending a printer ID (e.g., printer name) along with the printer resource information to indicate to the administrator the printer associated with the incoming resource information.

This implication is supported by Fan's figure 6 which displays a notification that is sent to an administrator. The notification includes the printer name "PP1" and the status or resource information associated with that printer (e.g., "cover open"). Fan's printer name reads on the claimed static state of the image printing device.

B. The previous rejection relied on a combination of Fan and White to teach the processing step.

Applicant argues that White does not teach the claimed limitations because White's collection server cannot correspond to the claimed first monitoring computer because it is not the first computer to obtain the first device information from the plurality of image printing devices. However, the previous rejection never relies on White for this feature of Applicant's claim.

Fan already disclosed the features of the system relating to the first monitoring computer (i.e., Fan's server) that is the first to receive printer resource information from a printer [Fig. 3 «items 240, 248»]. Fan however did not disclose monitoring a plurality of printers and collecting a statistical summary of status information of each of the plurality of printers.

White however discloses monitoring a plurality of printers [Fig. 1A «item 16»] as well as providing a statistical summary of status information of each of the printers [column 1 «lines 56-60» | column 8 «lines 40-60»: where White discloses collating or merging printer information into a single report (i.e., statistical summary)]. The term "statistical summary" is broad and subject to a variety of reasonable interpretations.

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For example, White discloses providing resource usage information comprising job attributes [column 5 «lines 25-35»]. White's collated or merged resource usage information reads on Applicant's claimed "statistical summary."

Thus, the rejection proposes modifying Fan's server (i.e., first monitoring system) to include functionality of White's collection server. Under such a modification, Fan's server would then be capable of collating and merging resource information from multiple printers. This modification would not change Fan's teaching that the server is the first computer to receive the information from the printers.

C. White teaches that a second device may retrieve resource usage information from a first monitoring computer upon request.

Applicant argues that Fan is limited to teaching notifying of a low printer resource level only when the level is below a threshold. Applicant's amendment does overcome Fan but does not overcome White because White teaches that a user (i.e., second device) may request to see a printer's resource usage information at any time (i.e., upon request of the user) [column 8 «lines 53-60»: disclosing that a user may access the resource usage information "as desired" (i.e., upon request)].

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III. CLAIM REJECTIONS - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- A. **Claims 1, 3, 4, 6, 7, 11, 21, 22, 24, 25, and 29-32 are rejected under 35 U.S.C §103(a) as being unpatentable over *Fan et al*, U.S Patent No. 6.310.692 [*“Fan”*], in view of *White et al*, U.S. Patent No. 6.952.726 [*“White”*].**

In the following claim mapping, all citations are to *Fan* unless otherwise noted.

Claims 1 and 11

As to claim 1, *Fan* as modified by *White* discloses a method of monitoring a plurality of image printing devices communicatively coupled to a network [column 3 «line 67»], comprising:

periodically obtaining, from an image printing device of the plurality of image printing devices by a first monitoring computer using a first Internet protocol over the network, first device information of the image printing device, the first device information including at least two of static, semi-static, and dynamic states of the image printing device [See response to arguments | Figure 3 «items 250, 248» where : *Fan*’s server reads on claimed first monitoring

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computer and Fan's printer reads on claimed first device | column 4 «line 63» to column 5 «line 14». Fan does not expressly disclose that the printer has sensors but this function is implied by the fact that the printer provides resource information to the first computer. Fan's printer resource level and printer name read on claimed dynamic and static state, respectively. Fan does not expressly disclose that the device ID is included in the device information but this feature is implied by the fact that printer names are displayed on a GUI of status information (Fig. 5: disclosing a GUI that includes printer names)];

storing, by the first monitoring computer, the obtained first device information into an information storage [column 5 «lines 15-18»];

processing, by the first monitoring computer [Fig. 3 «item 246»: supervisor computer], stored information of the plurality of image printing devices monitored by the first monitoring device to generate second device information that includes a statistical summary of status information of each of the plurality of image printing devices [See Response to Arguments above | column 5 «lines 1-26»: printer sends information to a supervisor computer which sends information to the clients & White, column 2 «lines 63-67» | column 7 «lines 22-30» | column 8 «lines 40-60»: the resource collector within the collection server collects and collates printer usage information]; and

transmitting, at regular periodic intervals or upon request, the second device information using a second Internet protocol from the first monitoring computer to a second computer that is connected to the network of the plurality of image printing devices [Figures 10-12 | column 4 «lines 11-14»: transmitting the notification to the client computer | column 5 «lines 45-59» : email or paging & White, column 8 «lines 53-60»: accessing the resource information "as

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desired" | column 9 «lines 14-20»: monitoring information accessed using a browser by end users on the same network as the printers];

wherein the first monitoring computer is remote from the plurality of image printing devices, and the first monitoring computer is the first computer to obtain the first device information from the plurality of image printing devices [Figure 3 «items 248, 250»].

As indicated in the foregoing mapping, while Fan discloses processing stored information of a single image printing device, Fan does not expressly disclose processing stored information of a plurality of image printing devices to generate second device information that includes a statistical summary of status information of each of the plurality of image printing devices. Fan also does not disclose, upon request, transmitting the second device information from the first monitoring computer to a second computer. However, these features were well known in the art at the time of Applicant's invention as evidenced by White.

1. White discloses generating statistical summary of status information of each of the plurality of image printing devices.

It should first be noted that Fan does disclose generating device information from stored information of single image printing device [column 5 «lines 45-59»] but does not indicate doing so from a plurality of image printing devices. In the same field of invention, White is directed to a system for monitoring resource usage in a network system. Specifically, White is directed at solving the problem where data from printers “must be collected from each printer server or printer individually and by hand, and the data from individual printers must then be collated and merged by hand to provide an overview of printer use in, for example, a department or corporation” [column 1 «lines 57-60»].

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As cited in the foregoing claim mapping, White solves this problem by introducing a collection server which stores usage information from a plurality of image printing devices and subsequently generating device information that includes status information from each of the plurality of image printing devices. It would have been obvious to one of ordinary skill in the art to have modified Fan's remote monitoring system to include the ability to collect and collate usage information from a plurality of printers as taught by White.

Specifically, the rejection proposes modifying Fan's server to include the functionality of White's collection server. Such a modification improves Fan's server because it would allow the automatic collection and merging of printer status/usage information [White, column 1 «lines 56-60»].

2. White also discloses upon request, transmitting the second device information from the first monitoring computer to a second computer.

White teaches that a user (i.e., second device) may request to see a printer's resource usage information at any time (i.e., upon request of the user) [column 8 «lines 53-60»: disclosing that a user may access the resource usage information "as desired" (i.e., upon request)].

It would have been obvious to one of ordinary skill in the art to have modified Fan's printer monitoring system to include the "upon request" functionality taught in White. Specifically, the rejection proposes modifying Fan's server to contain the functionality found in White's collection server which allows users to request printer resource information "as desired." Such a modification to Fan's server is an example of using a known technique (White's collection server allows users to request collated resource usage information) to improve similar systems (Fan's printer monitoring server) in the same way (Fan's system improved to allow

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users to request notifications as desired instead of just when the resources are below a threshold).

See MPEP § 2143.

As to claim 11, as it does not teach or further define over previously claimed limitations, it is similarly rejected for at least the same reasons set forth for claim 1.

Claims 3 and 23

As to claim 3, Fan discloses the first Internet protocol and the second Internet protocol are different Internet protocols [Figures 10-12 | column 4 «lines 4-8» where the second internet protocol take the form of http messages to the end user]. Fan does disclose that the device sends messages to the first computer [column 5 «lines 3-11»] but Fan does not expressly disclose the message comprises an Internet electronic mail message. Sending emails containing status information from a monitored device to a monitoring device is well known in the art. Fan describes a pushing based method of sending messages whereby the printer initiates the process of sending status information to a supervising computer [column 5 «lines 3-14»].

It would have been obvious to one of ordinary skill in the art to have implemented email into Fan because email is a well known push-based messaging system. Email functionality has several benefits including the ability submit usage information when no response is required from the receiving party.

Claim 23 is rejected for the same reasons set forth for claim 3.

Claims 4 and 24

As to claim 4, Fan as modified by White discloses the transmitting step comprises:

formatting the second device information into a format suitable for display on a web page [White, column 9 «lines 14-20»: use of a browser to view the resource usage monitoring

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information implies that the monitoring information has been formatted for display on a web page]; and

receiving a request for transmission of the second device information to the second computer from the second computer [column 1 «lines 33-36»].

It would have been obvious to one of ordinary skill in the art to have modified Fan to include the feature of formatting the usage information for display on a web page as taught by White. Such a modification is a clear improvement to Fan's system because it would allow users to remotely access the monitoring information using traditional browsers.

Claim 24 is rejected for at least the same reasons for claim 4.

Claim 6

Fan as modified by White discloses:

generating, by the first monitoring computer, the second device information to include summary information regarding usage of plurality of image printing devices [column 4 «lines 20-29 and 51-59» & White, Fig. 1a «items 16»];

wherein the step of transmitting the second device information from the first monitoring computer comprises transmitting, by the first monitoring computer, the second device information that includes the information regarding usage of the device to the second computer [column 4 «lines 20-29 and 51-59»].

Claim 7

Fan discloses each of the plurality of image printing devices is one of a printer, a copier, a multifunction device, and a facsimile machine [Figure 3 «item 250» | White, Fig. 1a «items 16»].

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Claims 21 and 25

As to claim 21, Fan as modified by White discloses a method of monitoring a plurality of monitored devices communicatively coupled to a local network, comprising:

periodically receiving from the plurality of image printing devices at a monitoring site using a first internet protocol, first device information of the plurality of image printing devices by a service center computer that is remote from the plurality of image printing devices, wherein the first device information includes at least two of static, semi-static, and dynamic states of the image printing devices [column 5 «lines 1-26» : pulling based model and White, column 2 «lines 63-67» | column 7 «lines 22-30» | column 8 «lines 40-60»: the resource collector within the collection server collects and collates printer usage information];

storing, by the service center computer, the obtained first device information into a storage device [column 5 «lines 15-18» | Fig. 3: Fan's supervisor computer reads on service center computer];

processing, by the service center computer, information in the storage device of the plurality of image printing devices monitored by the service center computer to generate a usage report for the plurality of image printing devices that includes a statistical summary of status information of each of the plurality of image printing devices [Fig. 3 | column 4 «lines 49-62» : notifications on resource usage | column 5 «lines 45-59» where the notification includes both the first device information collected from the printer as well as stored information such as the email addresses of the administrator or end users who are to receive the notification | White, column 2 «lines 63-67» | column 7 «lines 22-30» | column 8 «lines 40-60»: the resource collector within the collection server collects and collates printer usage information]; and

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transmitting, at regular periodic intervals or upon request, the usage report, using a second Internet protocol, from the service center computer to a second computer [column 4 «lines 49-62» and White, column 8 «lines 53-60»: accessing the resource information "as desired" | column 9 «lines 14-20»: monitoring information accessed using a browser by end users on the same network as the printers]

As indicated in the foregoing mapping, Fan does not expressly disclose processing stored information of the plurality of image printing devices to generate second device information that includes status information of each of the plurality of image printing devices. Fan also does not disclose, upon request, transmitting the second device information from the first monitoring computer to a second computer. However, these features were well known in the art at the time of Applicant's invention as evidenced by White for the reasons discussed in the rejection of claim 1.

As to claim 25, as it does not teach or further define over previously claimed limitations, it is similarly rejected for at least the same reasons set forth for claim 21.

Claim 22

Fan as modified by White discloses transmitting the usage report from the service center computer to the second computer as an e-mail message, wherein said email message is transmitted at an application layer [column 4 «lines 59-62»].

Claims 29 and 30

These do not teach or further define over previously claimed limitations, they are similarly rejected for at least the same reasons set forth for claims 1, 21, and 25.

Claims 31 and 32

Fan as modified by White discloses the network is either a wide area or local area network [White, column 3 «lines 26-28»].

B. Claims 2 and 5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Fan* and *White*, in further view of *Sekizawa*, U.S. Patent No. 6,430,711.

All citations are to Fan unless otherwise noted.

Claim 2

Fan does not expressly disclose the first Internet protocol and the second Internet protocol are a same Internet protocol. However, such a feature was well known in the art at the time of Applicant's invention. In the same field of invention as Fan, Sekizawa discloses an invention for obtaining status information indicating the state of network printers connected to a network. However, Sekizawa improves Fan's system by disclosing that the status information is emailed from the printer to a first monitoring computer [Sekizawa, column 4 «lines 6-17» : printer transmits status information to a mail server] and emailed from the first computer to a second computer [Sekizawa, column 6 «lines 9-17» : retrieving the email from the first computer]. This email functionality is an improvement over Fan's system because "it is not necessary to establish connection each time the status-information is exchanged" and therefore the second computer "can smoothly get the status information" [Sekizawa, column 4 «lines 17-21»].

Claim 5

As to claim 5, Fan discloses the second device information comprises an Internet electronic mail message [column 4 «lines 59-62»]. Fan does not expressly disclose the message

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comprises an Internet electronic mail message. However, as discussed with respect to claim 2, Sekizawa does disclose utilizing email messages as a means for transmitting status information. Sending emails containing status information from a monitored device to a monitoring device is well known in the art. This email functionality is an improvement over Fan's system because "it is not necessary to establish connection each time the status-information is exchanged" and therefore the second computer "can smoothly get the status information" [Sekizawa, column 4 «lines 17-21»].

IV. CONCLUSION

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-3942. The examiner can normally be reached on Monday to Friday [10 am - 6 pm].

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on (571)272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOHM CHANKONG/
Primary Examiner, Art Unit 2452